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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,041

09/27/2005

Kenzo Fukuda

125436

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07/10/2009

OLIFF & BERRIDGE, PLC

P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER

SACKEY, EBENEZER O

ART UNIT

PAPER NUMBER

1624

MAIL DATE

DELIVERY MODE

07/10/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/551,041

**Applicant(s)**

FUKUDA ET AL.

**Examiner**

EBENEZER SACKEY

**Art Unit**

1624

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 02/03/06

**DETAILED ACTION**

**Status of the Claims**

Claims 1-6 and 13-16 are pending.

Claims 13-16 have been withdrawn.

This is in response to the office action mailed on 01/06/09.

Claims 7-12 have been cancelled.

***Information Disclosure Statement***

The WO 97/40009 A1 and JP A 59-110691 filed on Information Disclosure Statement of 02/03/06 has been initialed and is attached herewith.

***Claim Rejections - 35 USC § 112***

The rejection of claims 1-6 under 35 U.S.C 112, second paragraph has been withdrawn.

**Claim Rejections - 35 U.S.C. § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-6 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Koyanagi et al., U.S. Patent number 6,187,944 for the reasons set forth in the previous office action mailed on 01/06/09.

4.

***Response to Amendment/Remarks***

Applicant's arguments filed on 04/06/09 have been fully considered but they are not deemed persuasive. Applicants argue that:

1. The current process produces selectively E-3-acyloxyacrylonitrile compound without using a base, with the removal of hydrogen chloride from the system.

2. Similarly, Z-3-acyloxyacrylonitrile compound is produced using an inorganic base, with the removal of hydrogen chloride from the system. Applicants assert the above process is contrary to the teaching in Koyanagi et al., which teaches the production of Z-3-acyloxyacrylonitrile, using an inorganic base of alkaline metal or alkaline earth metal, thus, Koyanagi fails to teach or suggest stereoselectively producing E or Z-3-acyloxyacrylonitrile. Contrary to applicant's assertion, Koyanagi teaches that both E and Z isoforms of acrylonitrile compound can be produced from their disclosure. See column 6, lines 29-55 and note the use of organic base (pyridine) on line 59. The only

feature not mentioned in the reference is the removal of hydrogen chloride from the system as a by-product. However, such a feature is not considered as an inventive step barring a showing to the contrary. Thus, a slight difference in process parameters may serve to differentiate the process under 35 U.S.C 102 but, does not serve to remove the relied upon reference from under 35 U.S.C 103. Applicants have not provided any evidence to demonstrate the criticality of the removal of the hydrogen chloride. A *prima facie* case of obviousness is established when the teaching from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F .2d 781, 783, 26 USPQ 2d 1529, 1531 (Fed. Cir.1993).

Therefore, at the time of filing this application, one of ordinary skill in the art in possession of Koyanagi et al., would have had a reasonable expectation of success in practicing the instant invention absent a showing of unexpected results and/or properties. Note that applicants and Koyanagi employ similar reactants. Note Table I-a is replete with compounds which fall under the claimed invention. See for example a-3 to a-5; a-256 to a-260 and Table I-c Z-isomer c-61 and E-isomer c-63. Applicants have requested for the rejoinder of claims 13-16. However, in view of the restriction of record, such a request cannot be granted since reactants and conditions are different from the elected invention and such would constitute an undue burden on the Examiner to rejoin claims 13-16. Thus, for the reasons of record, claims 1-6 remain rejected.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EBENEZER SACKKEY whose telephone number is (571)272-0704. The examiner can normally be reached on 7.30-4.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Ebenezer O. Sackey**  
**Patent Examiner, Art Unit 1624**

**/James O. Wilson/**  
**Supervisory Patent Examiner, Art Unit 1624**